TOP WEATHER EVENTS OF THE DECADE 2000-2009

(IN ORDER OF OCCURRENCE)

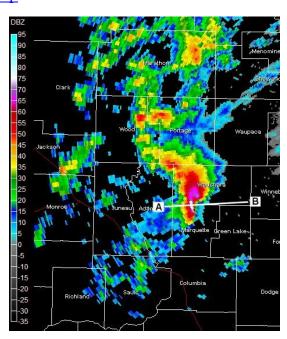
1.) Earliest Tornado on Record for Milwaukee County – March 8, 2000

A rare, out-of-season tornado struck the cities of Milwaukee, Cudahy, and St. Francis during the early evening hours. WFO MKX meteorologists on duty at the time believe an outflow boundary was pushed northwestward to the Mitchell Field area by an earlier thunderstorm which clipped the southeast corner of Milwaukee County between 5:25 and 5:40 PM. There was also evidence of a lake breeze. This intersection of the outflow boundary and lake breeze front may have helped focus low-level circulations which later coupled with the mesocyclone aloft in the thunderstorm moving northeast out of western Racine County, resulting in a tornado. Based on storm spotter and other eyewitness reports, the tornado spun up east/northeast of the main terminal building, just east of Runway 19 at General Mitchell International Airport at 6:12 PM. This tornado moved northeast and dissipated on the west side of St. Francis Nathanael Greene Park at 6:20 PM. The Milwaukee tornado has been rated at the top of the F1 range with winds around 110 mph. Sixteen people were injured and there were no fatalities. Based on Milwaukee County Emergency Management documentation, total estimated damage was \$4,599,000. Many motor vehicles were overturned, roofs were partially peeled off homes, power lines and trees were toppled, and gas leaks were reported. This is the earliest confirmed tornado to strike Milwaukee County going back through the weather record books to 1840.

http://www.crh.noaa.gov/mkx/document/tor/030800.php

2.) Hail Super storm - May 12, 2000

During the late morning of May 12, 2000, a single "high-precipitation" supercell thunderstorm developed in west-central Wisconsin, and moved east across the southern four counties of the NWS Green Bay forecast area. Hail up to the size of baseballs, driven by winds in excess of 60 mph, produced incredible damage in Waushara, Winnebago, Calumet, and Manitowoc counties. Chilton and St. Nazianz were particularly hard-hit by very large hail and hurricane force wind gusts well over 75 mph. Total damage from the storm in Wisconsin was nearly \$122 million, much of that in the NWS Green Bay forecast area. Information from NWS-Green Bay http://www.crh.noaa.gov/grb/events/051200.php

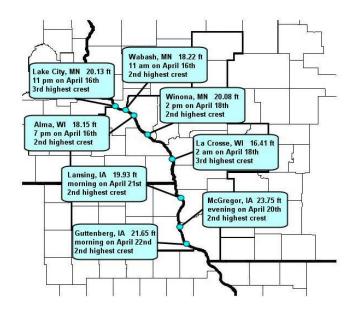


base reflectivity radar image -10:31 am CDT

3.) Mississippi River Flood of 2001

March of 2001 brought significant snows to parts of Minnesota and Wisconsin. Cold temperatures in the north helped limit the amount of melting of the snow pack, although locations such as La Crosse, WI and points south lost their snow cover by the end of March.

On April 5th and 6th, and then again on the 11th, showers and thunderstorms brought heavy rains to the Upper Mississippi River Valley. These rains, in excess of several inches in some locations, caused a rapid snow melt. Water from this snow melt, in addition to rain itself,



funneled into area streams, creeks and rivers, causing rapid rises and flooding. Eventually, most of this water flowed into the Mississippi River. The Mississippi River responded quickly for a river of its size, reaching flood stage from the impact of the first rains within a week. The additional rainfall on the 11th had the added impact of not only increasing the height of the crests, but extending the length of time locations remained above flood stage. The last site in the local area finally dropped below flood stage on May 18th. The flood brought the 2nd to 3rd highest crest on record to many Mississippi River locations. Information and graphic from NWS-La Crosse

http://www.crh.noaa.gov/arx/events/missflood_2001.php

4.) Siren Tornado – June 19, 2001

At 8:06 pm on June 18th, 2001, an EF3 tornado touched down 2 miles East-Northeast of Grantsburg, Wisconsin. The tornado continued east and eventually reached Siren around 8:20 pm. The tornado continued to travel east to 14 miles east of Siren. The NWS in Duluth had a 50 minute lead time on the tornado warning before it moved through Siren. The most extensive damage was in a 6 block wide area in Siren, where numerous homes were leveled. There was also extensive structural damage to many buildings. The average width of the tornado was 1/8 to 1/4 mile, with the widest width being about a half mile. Preliminary indications are that the path length of the tornado was about 27 miles. Two people died as a direct result of the tornado, with another person killed indirectly after the tornado. In all, there were 16 injuries as a result of the tornado.

Information courtesy of NWS-Duluth

http://www.crh.noaa.gov/dlh/science/event archive/summer archive/Siren/siren.php

5.) Ladysmith Tornado – September 2, 2002

At 4:20 pm this Labor Day tornado spun up about one and one half miles west-southwest of downtown Ladysmith. The tornado was initially ranked an F0, but strengthened to an F2 at the intersection of highways 8 and 27 on the west side of town. The tornado further intensified to F3 strength just east of the railroad tracks near the Baptist church, and proceeded to tear up the downtown business area. The tornado remained at F3 strength for

about a mile, before weakening to a F1 as it exited the east side of the town. The tornado remained on the ground for about 15 miles and moved at about 30 mph. The tornado was one quarter of a mile wide at its widest point. It finally lifted off around 4:50 pm about two miles south of the town of Ingram. EF3 tornadoes contain estimated winds of 158 to 206 mph on the **Fujita Scale.** The tornado was one quarter of a mile wide (400 m) at its widest point. Overall damage was estimated at \$20 million. There were no injuries or deaths. Information courtesy of NWS-Minneapolis/Chanhassen http://www.crh.noaa.gov/mpx/HistoricalEvents/2002Sep02/index.php

6.) Drought year -2003

Drought affected parts of Wisconsin throughout most of 2003. The worst drought conditions, rated as extreme, persisted over west-central Wisconsin through most of the year, especially around La Crosse. This area was about 10 inches below normal precipitation for the year. Much of the remainder of Wisconsin periodically had moderate to severe drought conditions. The soybean crop over southern Wisconsin took a pretty significant hit. Scattered locations also suffered from corn and hay crop damage.

7.) Rainy Months and Flooding – May & June 2004

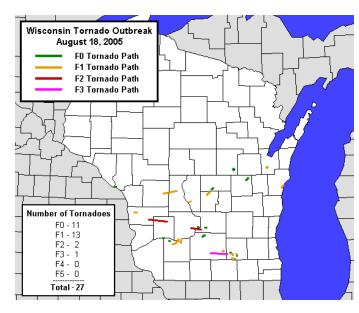
Continuous waves of severe thunderstorms and heavy rains during May and June led to the development of the most significant weather period of 2004. Madison recorded 10.84 inches in May, or 7.59 inches above average, Green Bay recorded 8.31 inches, or 5.56 inches above average, and Milwaukee recorded 8.18 inches, or 5.12 inches above average. Numerous COOP observers across central and southern Wisconsin reported 9 to 15 inches of rain in May alone. Although June featured near normal rainfall, any additional rain on top of the saturated ground left behind from May, only made the flooding worse. Thousands of homes and businesses sustained water damage from flooding. Widespread crop damage resulted as the heavy rains washed away most of the newly planted crop and many low lying fields became small lakes. Lake Michigan water levels rose 11 inches in the month of May alone, after gradually falling 4 feet between the years of 1997 and 2003. Total property damage was estimated at nearly 50 million dollars and crop damage was estimated at nearly 300 million dollars. Some flooded rivers and standing water in open fields finally receded or dried up in early July.

8.) Major severe weather outbreak across S. Wisconsin – June 23, 2004

June 23rd was an active day, severe weather-wise across the area, as 3 complexes of thunderstorms developed in Minnesota and raced southeast into central and southern Wisconsin. Widespread wind damage resulted from these storms with 17 tornadoes, nearly the yearly average of 20, embedded within the complex. June 23 was ranked as the 4th all-time highest tornado day in Wisconsin, having four F0 tornadoes, nine F1 tornadoes, two F2 tornadoes, and two F3 tornadoes.

The northern complex produced 5 tornadoes, all of the F0 or F1 variety, across portions of Portage, Waupaca, Outagamie, and Brown counties. Damage was extensive along the tornado paths, however overall wind damage was fairly minor. The central complex featured a string of 14 tornadoes from near Taylor in Jackson County to near Jackson in Washington County. The strongest tornadoes occurred in this string, where two F3 tornadoes ripped through Green Lake, Fond du Lac, and Dodge counties. One person died and another was

injured, near Markesan in Green Lake County, when they were 'sucked' out of their basement as the tornado passed right over their home. Straight-line winds were estimated to have reached 80 mph across portions of Columbia. Green Lake, Fond du Lac, and Dodge counties, further contributing to extensive damage. The southern complex, although weaker, did produce 3 tornadoes including one F1 tornado just south of Madison. This complex also produced straight-line wind gusts to 80 mph. Total property damage was estimated to have reached 28.8 million across Wisconsin. Due to crops already heavily damaged by flooding, total crop damage from these storms was only about 3 million dollars.



9.) Record Tornado Outbreak – August 18, 2005

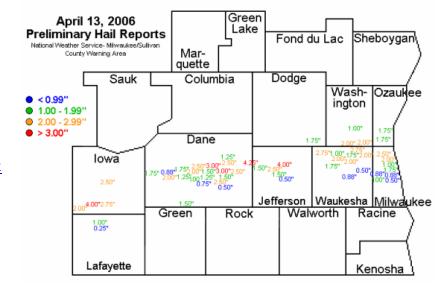
A surface low pressure system was located over extreme southeast Minnesota early in the afternoon on Thursday, August 18, 2005. A warm front extended east southeast from the low and had dew points pooling in the lower 70s along it. The surface low moved east into east central Wisconsin by 10 PM CDT that evening. Favorable wind shear associated with the warm front, combined with the strong instability supplied by the heat and humidity resulted in a record outbreak of 27 tornadoes across Wisconsin in the late afternoon and evening. The previous record of 24 tornadoes was set on May 8, 1988. There were 16

confirmed tornadoes in the NWS Milwaukee/Sullivan County Warning Area, 5 confirmed tornadoes in the NWS Green Bay County Warning Area and 6 confirmed tornadoes in the NWS La Crosse County Warning Area.

http://www.crh.noaa.gov/mk
x/document/tor/081805.php

10.) Hail storm in Southern Wisconsin – April 13, 2006

Thunderstorms with



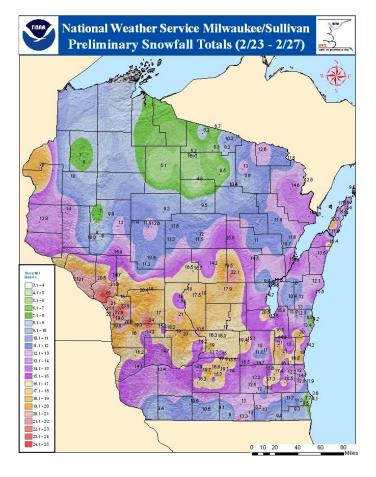
very large hail moved east across southern Wisconsin during the evening hours of April 13, 2006 (840 P.M. to about 11 P.M.). In the Milwaukee/Sullivan NWS Office's County Warning Area (CWA) of south-central and southeast Wisconsin, there were numerous reports of hailstones ranging from 1.75 inches to 3.0 inches in diameter. The largest hailstone

of 4.25 inches was measured by a State Trooper about 3 miles northwest of Lake Mills in Jefferson County at the intersection of Newville Road and Interstate 94.

The affected area stretched primarily from Iowa County through Dane, Jefferson, Waukesha, and Milwaukee Counties. In addition, large hail fell across the southern parts of Washington and Ozaukee Counties. There were numerous reports of damage to vehicles, to buildings with vinyl or aluminum siding, to other windows in various kinds of structures, and to pole sheds. Most of the largest hailstones were produced by a supercell thunderstorm which moved from Iowa County to Milwaukee County.

11.) Winter Storm/Blizzard – February 23-25, 2007

Southern Wisconsin experienced two rounds of winter weather during the weekend of February 23-25, 2007. Round 1 of the winter storm occurred Friday night into early Saturday morning. Ahead of a developing low pressure system over the Rocky Mountains, snow spread across south central and southeast Wisconsin right after sunset Friday. Accumulations ranged from 2 to 5 inches south of State Highway 18. North of Highway 18, winter storm conditions developed. Accumulations ranged from 5 to 8.5 inches. This snow was more on the dry side with snow to water ratios of 13 to 15 to 1. Round 2 occurred in the form of a blizzard Saturday night into early Sunday. A strong low pressure system moved from Kansas through northern Missouri to western



Illinois and blizzard conditions developed across most of southern Wisconsin. Periods of moderate to heavy snow and thunder snow, along with east winds frequently gusting to 35 to 45 mph, created the blizzard conditions.

Visibilities were frequently reduced to 1/8 to 1/4 mile, especially in open areas. Snow drifts of 1 to 4 feet in height developed on some roads, and there were other reports of 5 to 7 foot drifts in some yards. Snow accumulations from 6 PM Saturday to 6 AM Sunday, in those areas that experienced blizzard conditions, ranged from 6 to 12.5 inches. The snow was heavy and wet. 12.5 inches was measured at the NWS Forecast Office about 3 miles southeast of the village of Sullivan in eastern Jefferson County.

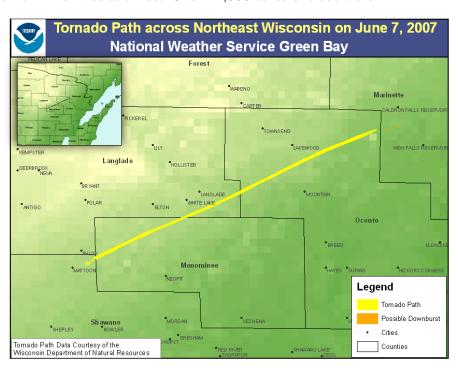
http://www.crh.noaa.gov/mkx/?n=022407_snow

12.) Severe Weather Outbreak in Northern Wisconsin – June 7, 2007

Fast moving supercell thunderstorms with damaging winds, hail larger than 5 inches in diameter, and tornadoes ripped across central and northeast Wisconsin on June 7, 2007. Five tornadoes touched down in central and northeast Wisconsin.

A long-track tornado touched down at 4:31 pm east of Mattoon in Shawano County and continued northeast to the Oconto-Marinette County line. The tornado was on the ground for at least **40 miles** and was over 1/2 mile wide at times. Over 14,000 acres of trees were

snapped or flattened and many dozens of buildings were damaged or destroyed. The twister was rated an EF3 on the Enhanced Fujita scale, with estimated winds of 140 to 160 mph. Damage by this tornado alone exceeded \$15 million (property and timber). The most severe structural damage occurred 3.5 miles east of the city of White Lake in Langlade County. The Bear Paw Outdoor Adventure Resort sustained severe damage. Nearly every building



was damaged or destroyed, including a three-story inn. As the tornado moved northeast into the Nicolet National Forest in Oconto County, it flattened tens of thousands of trees as it headed toward Highway 64. The damage path near Highway 64 was three-quarters of a mile wide! The twister caused EF2 damage four miles north of the city of Mountain on Highway 32, in the town of Riverview, with estimated winds of around 130 mph. The width of the tornado in this area was almost 1/2 mile.

At 4:01 pm, a tornado touched down 10 miles east of Mosinee in a forested area of Marathon County. It traveled 7.3 miles through farmlands and woodlands before lifting or dissipating about 4 miles south of Hatley, just north of Pike Lake. The width of the tornado was approximately 250 yards. The tornado was rated EF2, with winds estimated at 115 to 125 mph. Estimated damage from this twister was nearly \$350,000. Hundreds of trees were

snapped or uprooted along the path. Ten homes sustained at least minor damage.

Hailstones of 4 to 5+ inches in diameter fell across Port Edwards and Wisconsin Rapids in Wood County around 4:30 pm. A hailstone 5.5" in diameter was measured in Port Edwards, which is the second largest hailstone in Wisconsin weather history. (The largest hailstone in Wisconsin is 5.7" in diameter which fell in Wausau in May 1921.)



The large swath of hail caused considerable damage across the Port Edwards and Wisconsin Rapids area. Thousands of homes and buildings sustained damage, as did many cars. Damage estimates from the hail in Wood Co. was over \$40 million. More information on this severe outbreak can be found at http://www.crh.noaa.gov/grb/?n=070607

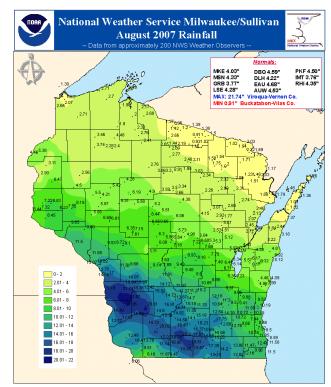
13.) Heavy Rain and Flooding – August 2007

Record daily, August, and wettest monthly rainfall records were set over portions of southern Wisconsin during August 2007. During the month, 143 new daily precipitation records were established. Sixty of these records occurred between August 18th and 20th. Total damage to property and crops was at least \$112.4 million, with most of it in west-central and southwestern Wisconsin. There were numerous reports of mud/debris slides, road closures, flooded homes and businesses, as well as some undermined bridges. Repeatedly during the month, several rounds of thunderstorms with heavy rains moved east-southeast through the southern counties of the state. Ultimately, 14 counties received a federal disaster declaration for flooding that occurred from August 18-31st. It all started overnight August 4th to the early morning hours of August 5th, when 6 to 10 inches of rain fell over eastern Iowa Co. into southwestern Dane Co., and 1 to 5 inches over the remainder of southern Wisconsin. Another round of 2 to 5 inches of rain fell overnight August 5th into August 6th across southern Wisconsin, leading to additional minor flooding, especially in the counties near Illinois.

Very heavy rains fell overnight August 18th into August 19th, and most locations in the

southern third of the state picked up 3 to 7 inches, but up to 10 to almost 12 inches fell in parts of La Crosse and Vernon Counties. Additional round of thunderstorms with heavy rains occurred from August 20th through August 23rd across southern Wisconsin. Most rivers and streams exceeded flood stage during August 2007.

Total August 2007 rainfall was generally 15" or more south of a line from La Crosse to Baraboo to Madison to Lake Mills to Delevan. Normal August rainfall is 4 to 4.5". Some spots in Vernon, Crawford, Richland, Iowa, Dane, and Green counties exceeded 20" for the month. Viroqua (Vernon Co.) measured the greatest amount of 21.74", which is a new record for the wettest month in Wisconsin, and a new state August record. The old record for the wettest month in Wisconsin belonged to Port Washington (Ozaukee Co.) with 18.33" in June, 1996, and the old state August record was 16.61 inches in Phelps in August 1966. http://www.crh.noaa.gov/mkx/?n=0807 flooding

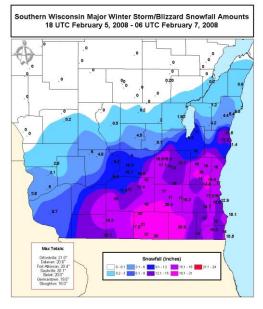


14.) Major Winter Storm – February 5-6, 2008

A major winter storm impacted south-central and southeast Wisconsin on February 5-6, 2008, with the hardest-hitting part of the storm during the morning of the 6th. This was a

long duration event coupled with strong gusty winds and some thunder. Blowing and drifting snow compounded the effects of the heavy snow. Total new snow accumulations in excess of 12 inches occurred in the area southeast of a line from Dubuque, Iowa to Madison to Beaver Dam to West Bend to Sheboygan. Up to 16 inches fell in the area from Monroe and Janesville to the Port Washington and Milwaukee area...with isolated 18 to 21 amounts reported. Total snow amounts tapered off quickly to 4 inches north of Wisconsin Dells and an inch or less across far northwest Marquette County.

The accumulating snow gradually decreased from west to east in the late afternoon and early evening hours on Wednesday the 6th...and finally ended near Lake Michigan by around midnight. Occasional heavy snowfall rates of 2 to 3 inches per hour were observed in that area where a total of 12 inches or more were



measured. The winds were out of the north at 15 to 25 mph with some gusts to 35 mph. These winds generated blowing and drifting snow, especially in open areas. Visibilities dropped to below 1/4 mile at times, and west-east orientated roads experienced considerable drifting, and 2 to 4 foot drifts. Some brief blizzard or near-blizzard conditions occurred near Lake Michigan where the winds were stronger, as well as in open, exposed areas over the remainder of southern Wisconsin. Some roads become impassable due to the blowing and drifting snow. A major traffic backup occurred on Interstate 39/90 westbound south of Madison with 1548 vehicles stranded for up to 12 hours. http://www.crh.noaa.gov/mkx/?n=020608_snow

15.) Heavy Rain and Flooding – June 2008

The first two weeks in June 2008 featured many days with rain, and a few days with an exceptional amount of rain, across Southern Wisconsin. Between June 1st and June 14th, Madison recorded precipitation *on every day except three*. In the same time span, Milwaukee recorded precipitation on every day except four days. However, it was not the extended period of rainy weather that caused flooding problems. Those problems were primarily due to two heavy rainfall events - one on June 7th to June 8th, and one on June 12th. At many locations, over 70% of the rain fell on those three days. Rainfall totals across Southern Wisconsin during the first couple weeks in June ranged between 6 and 12 inches, with an isolated corridor of 12-16 inches from Northern Sauk County into Northwest Dodge County.

A few rainfall records were broken at Milwaukee. On June 7th, 4.93" of rain broke the old record rainfall for the date which was 2.44" (June 7, 1916). On June 8th, 2.25" of rain broke the old record rainfall for the date which was 1.24" (June 8, 1974). Combined, these two days of rainfall broke the 48-hour all time rainfall record at Milwaukee. The previous record was 6.84", which was recorded on August 5-6, 1986. On June 7-8, 2008, Milwaukee

observed 7.18" of rain. Officially, Milwaukee observed 12.27" of rain for the month of June. This *easily* breaks the record for highest June rainfall total. The previous record was 10.13", set in 1917. Also, the 12.27" of rainfall observed at Milwaukee also sets a new record for maximum monthly rainfall.

Madison also broke some rainfall records in June 2008. On June 7th, 2.23" of rain broke the old record rainfall for the date which was 2.01" (June 7, 1993). On June 8th, 4.11" of rain broke the old record rainfall for the date which was 1.40" (June 8, 1874). On June 12th, 2.57" of rain broke the old record rainfall for the date which was 1.20" (June 8, 1877). Officially, Madison observed 10.93" of rain for the month of June. This *easily* breaks the record for highest June rainfall total. The previous record was 9.95", set in 1978. There was also a 24-hour period stretching from June 7th to June 8th where Madison recorded a 24-hour precipitation total of 5.27". This was the 2nd highest 24-hour precipitation total at Madison, and only 0.04" behind the record of 5.31", set on September 7-8, 1941.

Numerous area rivers hit record levels during a major flooding event over Southern Wisconsin in the early half of June. 25 locations reached record high levels. That represents over half of the 43 river gauges in the NWS Milwaukee/Sullivan hydrologic service area. Most of those that did not reach record levels had crests in the top 5 all time. Some of the data is missing, due to damage to the gauges, communications, and/or loss of power. Therefore, some of these crests may have been higher than the data suggests. http://www.crh.noaa.gov/mkx/?n=jun08_flooding

16.) Severe Weather Outbreak and 5" hail in Waukesha – June 7, 2008

After a late spring dominated by cooler weather, a major pattern shift in the upper level flow allowed a warm, humid air mass to push northward through the Central United States as early as three days in advance of the severe weather event on June 7th. The pattern was dominated by a trough in the Western U.S. and a ridge in the Eastern U.S. By the early afternoon that day, the surface dewpoints across Southern Wisconsin had risen into the low to mid 70s. When combined with warm temperatures on the order of 80 to 85 degrees, the atmosphere became very unstable - a key ingredient for severe thunderstorms. The vertical wind shear was also impressive across the region. Thunderstorms were ongoing at daybreak in Southern Minnesota on the northern periphery of the extremely moist air mass. These thunderstorms weakened during the late morning hours as they pushed through Southern Minnesota, but then rapidly re-intensified in the noon hour as they pushed into Southern Wisconsin.

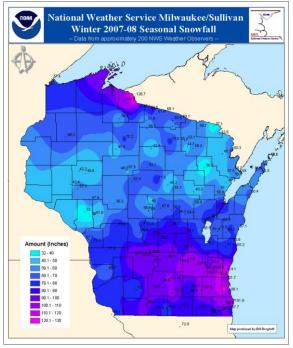
One of the thunderstorms intensified into a high-precipitation (HP) supercell just to the east of La Crosse, and eventually tracked through portions of Sauk, Columbia, Marquette, Green Lake, and Dodge Counties. As this supercell tracked across parts of Southern Wisconsin, it produced tornadoes, destructive straight-line winds to nearly 100 mph, and hail. As the afternoon progressed, numerous supercell thunderstorms developed over Southern Wisconsin, and produced a fairly widespread severe weather outbreak. Many cells produced widespread wind damage and significant hail. The most significant report received was a measured 5" diameter hailstone from just east-northeast of Delafield in Waukesha County. This hailstone is the 3rd largest hailstone in Wisconsin history! Coincidentally, the hailstone ranks behind a 5.5" hailstone that fell one year earlier, to the date, on June 7, 2007 in Northern Wisconsin.

17.) Record seasonal snowfalls in southern Wisconsin -- 2007-08

The winter of 2007-2008 was nothing short of an incredible one for Wisconsin, especially over southern and eastern sections! Several major winter storms impacted this region, a

couple which produced totals of 18 to 24 inches. Nineteen winter storms or lake-effect events produced 6 or more inches of snow across at least a portion of the state this winter, 9 of which produced more than a foot of snow and 3 of those produced at least 18 inches! Because Wisconsin was in the path of so many winter storms, it comes as no surprise several cooperative observer stations ended the snow season breaking the seasonal record. Seasonal snowfall records differ from annual rainfall records. Annual rainfall records are kept from January 1st to December 31st. However, seasonal snowfall records are kept from July 1st to June 30th.

Below is a table that lists <u>some</u> of the coop stations that broke its record and how the previous record compared. This table consists of only a small sampling - many more locations in southern and eastern Wisconsin broke their old all-time



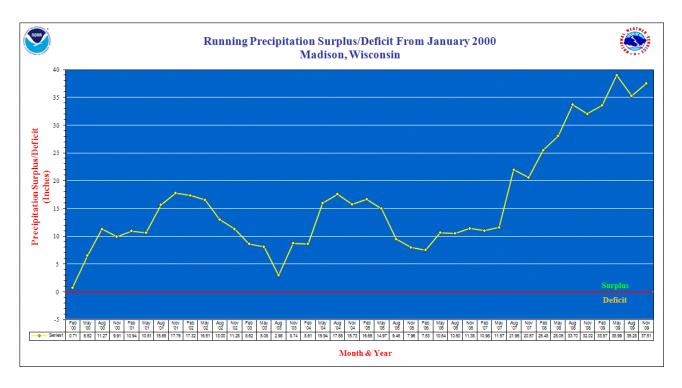
seasonal snowfall records. Normally about 40 to 54 inches of snow falls each season across southern Wisconsin. The snowfall records are in inches.

City	County	New Snowfall	Previous Snowfall	Season
		Record	Record	
West Allis	Milwaukee	122.1"	82.5"	1951-52
Racine	Racine	101.9"	86.1"	1959-60
Madison				
(Truax	Dane	101.4"	76.1"	1978-79
Arpt)				
Wisc. Dells	Sauk	96.5"	77.9"	1950-51
Kenosha	Kenosha	87.7"	76.4"	1977-78
Dodgeville	Iowa	73.5"	72.3"	1958-59
Beloit	Rock	66.8"	60.1"	1935-36

General Mitchell International Airport in Milwaukee recorded a seasonal snowfall total of 99.1" which fell short of the record of 109.8" set in the winter of 1885-86. Madison also set a new two-year snowfall record for the 2007-2008 and 2008-2009 seasons. With an above-normal snowfall total of 72.0 inches for the 2008-2009 winter season, the 2007-2008 and 2008-2009 winter seasons combined for 173.4 inches, breaking the old record of 153.9 inches for 2006-2008. Milwaukee experienced its second largest two-year snowfall total with 175.1 inches. The record of 183.9 inches was set is 1885-1887. http://www.crh.noaa.gov/news/display_cmsstory.php?wfo=mkx&storyid=16581&source=2

18.) High water table in southern Wisconsin -- June 2008 - Summer 2009

New lakes in low spots in farm fields, and some old springs were active for the first time in a couple decades. Many inland lakes had high water levels – flooding and sandbagging. These high water levels were caused by a combination of factors – heavy rains of August 2007, 2007-08 winter snowfalls of twice the average, heavy rains of June 2008, and above average snowfalls in southern Wisconsin. This was part of surplus precipitation for 2000-2009 over southwest and south-central Wisconsin. For this decade, there was 35-37 inches of surplus precipitation at Madison (shown in the graphic below). This surplus area extended east to western Waukesha County.



19.) U.S. records its coolest October on record—2009

The U.S. recorded its wettest October in the 115-year period of record. The nationwide precipitation of 4.15 inches was nearly double the long-term average of 2.11 inches. October was also the first month since December 2007 that no region in the United States recorded below normal precipitation. Moderate-to-exceptional drought covered 12 percent of the contiguous United State, the second-smallest drought footprint of the decade. Wisconsin experienced its 3rd wettest October on record.

20.) Winter Storm/Blizzard –December 8-9th

One of the biggest winter storms in years pounded much of Wisconsin on December 8th and 9th. The snow developed as low pressure rapidly deepened as it moved from the Southern Plains through Missouri through southeastern Wisconsin and then across Lake Michigan. Heavy snow fell over a large portion of the area with numerous locations reporting over a foot. One of the hardest hit areas in the state were Dane County (reports up to 20.2 inches in McFarland) and the northwestern corner of the state near Lake Superior (24

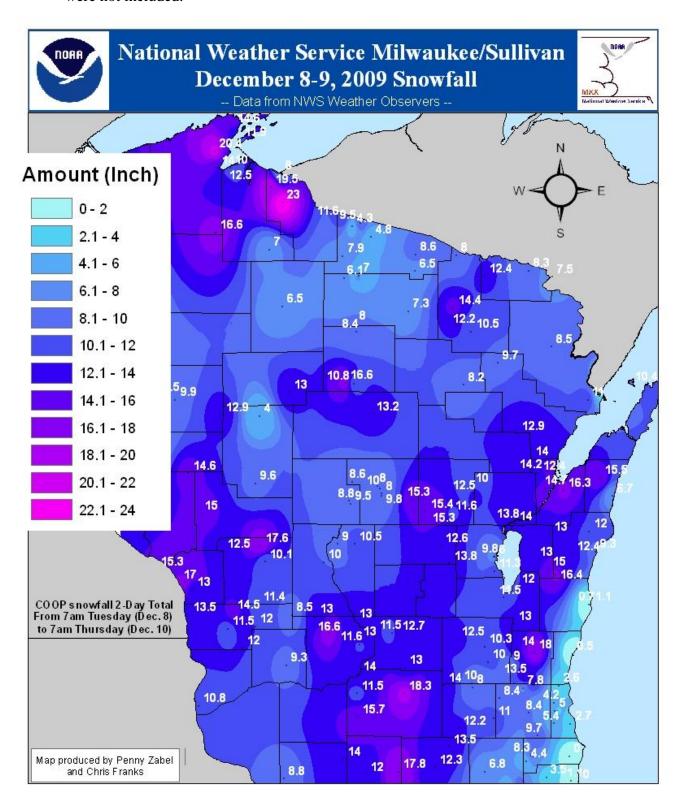
to 29 inches in the Gogebic Range in Iron Co.). Otherwise a large portion of the state picked up 10 to 16 inches. The La Crosse Airport picked up 17 inches, Reedsburg gathered 16.6 inches, and Wautoma came in with 16 inches. Locations along the shoreline from Sheboygan to Kenosha received less than 1 inch, and in a couple location – none. This was due to warmer air close to the center of the low pressure system, as well as from the flow off the milder Lake Michigan waters.

The 14.7 inches reported at the Green Bay airport places this storm in the top 6 biggest snowstorms in Green Bay weather history and is the biggest December snowstorm ever. The 14.1 inches reported at Dane County Regional Airport was the 6th highest 2-calendar day total reported since records began there in 1948. The greatest 2-calendar day snowfall for Truax Field is 17.3 inches set back on December 2-3, 1990. Madison Truax Field's 48-hour total of 18.3 inches from 6 am Tuesday December 8th through 6 am Thursday December 9th, may be the greatest 48-hour total at that location going back to 1948. We will have to double-check the record books to be sure.

Strong winds in response to the deepening low created blowing snow and near blizzard conditions. Winds gusted to over 50 mph in Door County and 48 mph at the NWS Green Bay office. In southern Wisconsin, winds gusted up to 45 mph near Lake Michigan. The winds in combination with the weight of the snow on tree branches resulted in thousands of broken tree branches that snapped power-lines. Tens of thousands of customers lost electrical power across the state.

The low pressure system not only produced heavy snowfall and strong winds across parts of Wisconsin, but produced very low barometric pressure readings as well. Milwaukee began observing a decrease in pressure the evening of the 7th, with the pressure dropping from 30.28 inches (1026.4mb) to 28.84 inches (976.8mb) by 8 am the morning of the 9th. The all-time lowest barometric pressure experienced in Milwaukee was 28.71 inches back on April 3, 1982. Madison began seeing a decrease the evening of the 7th as well, dropping from 30.27 inches (1026.5mb) to 28.91 inches (979.8mb) by 7 am the morning of the 9th. The all-time lowest barometric pressure experienced in Madison was 28.62 inches (969 mb) back on April 3, 1982. The pressure dropped 42 mb from 1024 mb to 982 mb in 24 hours at Green Bay.

Snowfall totals from across the state can be seen in the graphic below. Late snow reports were not included.



For more information please see the following links.

http://www.crh.noaa.gov/mkx/?n=120909_snow http://www.crh.noaa.gov/grb/?n=091209_blizzard

http://www.crh.noaa.gov/arx/?n=dec0909

OTHER MISCELLANEOUS INFORMATION

(NOT IN ORDER OF OCCURRENCE OR IMPORTANCE)

1.) Highest and lowest temperatures in Wisconsin

Minimum: -40° F – Foxboro, Douglas Co. –January 17, 2005

-Mondovi, Buffalo Co. -January 16, 2009

Maximum: 105°F – Ashland 3S, Ashland Co. – August 6, 2001

2.) Greatest and least seasonal snowfall

Minimum: 12.6" – Hartford, Washington Co. – 2002-2003

Maximum: 277.1" – Montreal, Iron Co. – 2000-2001

3.) Snowstorms with at least 20" Accumulations

Date	Location	Maximum Snowfall
December 21-22, 2000	northwest Bayfield Co.	22"
February 23-25, 2001	northeast Douglas Co.	20"
November 26-27, 2001	southern Bayfield Co.	20"
December 23-24, 2001	north central Bayfield Co.	21"
March 14-15, 2002	southeast Bayfield Co.	20"
April 27-28, 2002	Northern Langlade Co. – Elcho	20"
December 11-13, 2004	Iron Co. – Upson	26"
March 18-19, 2005	Jackson Co. – Alma Center	23"
March 13-14, 2006	Iron Co. – Pence	32" (a band of 20"+ extended from St. Croix Co. to Iron Co.)
February 23-26, 2007	Southern two-thirds of Wisconsin	15-26" (storm consisted of 3 rounds affecting different areas with 6-16")
April 3-4, 2007	Iron Co. – Gurney to Hurley	20-24"
February 5-6, 2008	Rock, Jefferson, Washington, and Ozaukee Counties	Spotty 20-21"
December 8-9, 2009	Wisconsin	Spotty 20-29''